

it seems to be an ideal place for the fish to breed.

However, observation during the first monsoon showers revealed that the fish which is a common sight on flour baiting, especially at Sati Ansuiya, was not sighted even once after an hour long baiting schedule. This suggests that in the Paisuni river the fish probably breeds upstream of Sati Ansuiya; this is a densely forested area lacking habitation. Since it is not accessible, it serves as a perfect sanctuary with undisturbed breeding grounds for *T. tor*, in particular, and fish assemblages in general. Also the origin of the river is quite near. The Tons on the other hand has habitation all along its course, and therefore the fish population is relatively low. Also breeding grounds, which must be in the upper

reaches, suffer from acute human interference (agriculture). Studies on population structure are in progress to understand how exploitation affects age distribution and ecological health.

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15. ON THE RECORD OF *GARRA CEYLONENSIS* BLEEKER 1863: A SRI LANKAN CYPRINID FISH FROM INDIA¹

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Introduction

Twenty four fish species under genus *Garra* have been reported so far from the Indian subcontinent (Jayaram 1999), of which nineteen species are found in India. Several new species and new records of the fishes under this genus have been reported in the past two decades. Remadevi and Indra

(1984) described *Garra menoni* from the Silent valley, Kerala, India; Vishwanath and Sarojnalini (1988) discovered *Garra manipurensis* from Manipur; *Garra kalakadensis* was discovered from the Kalakad Wildlife Sanctuary, Tamil Nadu (Remadevi and Indra 1992); *Garra surendranathani* from the Chalakkudy river of Kerala (Shaji *et al.* 1996) and *Garra*

periyarensis by Gopi (2001) from Periyar. However, so far, there is no report of the Sri Lankan species, *Garra ceylonensis* from Indian waters. During the species inventory surveys conducted in the rivers of Kerala, as part of the NAT-ICAR project on 'germplasm inventory, evaluation and gene banking of freshwater fishes', the authors collected eight specimens of *Garra ceylonensis* (Bleeker 1863) from the Pooyamkutty tributary of River Periyar.

The specimens were collected using a cast net of 12 mm mesh size, and gillnet of 32 mm mesh size from Pooyamkutty. Morphometric measurements were recorded with a dial reading calliper with an accuracy of 0.1 mm. This data has been presented as percentages, with the range followed by the mean in parentheses. Meristics were counted following Talwar and Jhingran (1991). Revisionary work on the fishes of genus *Garra* by Menon (1964) was also consulted.

Description: Based on 8 specimens collected from Pooyamkutty, Periyar river, ranging from 101.04 mm-121.4 mm SL.

D.II 8; P.12-13; V.I 7; A.I 5; C.17

Body elongate and slender. Depth of body 16.38-21.26% in SL (19.12%), mental disc well developed, length of the disc 98.41-99.79% (99.1%) in its own width and the latter 41.4-49.08% (44.24%) in the width of head. Snout pointing, tip marked by a transverse groove, horny tubercles on snout and sides in front of nostrils. Barbels two pairs, rostral barbels equal to or greater than diameter of eye. Eyes moderately large, not visible from ventral side of head, diameter 15.61-20.08% (17.60% of head length, 39.33-48.07% (45.52%) in interorbital distance. Interorbital distance slightly concave and is 32-41.78% (36.21%) in length of the head. Scales moderate sized. Distance of the vent from anal fin origin 35.9-38.21% (37.03%) in that between anterior origins of ventral fin and anal fin. Caudal peduncle length 11.52-14.86% (12.72%) in SL, 39.4-43.31% (41.85%) in head length and its least depth 84.78-95.74% (90.69%) in its own length.

Squamation: 34-35 scales along lateral line, 4-4.5 from origin of dorsal to lateral line, 3.5 between lateral line and pelvic fin origin, predorsal scales 11-23, preanal scales 13

and preanal scales 26, circumpeduncular scales 12. Breast and belly scaled.

Fins: Dorsal fin inserted closer to snout than to caudal. It is equal to head length. Pectorals slightly smaller than head and form 78.03-88.08% (83.86%) in it. Ventral fins smaller than head, and form 74.19-93.72% (81.73%) in it and in pectoral fin length. Distance between pectoral and ventral is 26.22-31.88% (30.12%) in SL. Distance between ventral and anal fins 24.24-26.56% (25.63%) in SL. Caudal forked.

Coloration: In life, olive green on the back and dull white underneath. A dark brownish black lateral band from the snout through eyes extending to caudal fin rays. This is bordered above and below by narrow yellowish stripes. Very light dark stripes are also seen on either side of the yellow bands which sometimes appear as small spots arranged in series. A black spot at the upper angle of gill opening present. Fins generally yellowish with rays have red orange tinge on their bases.

Distribution: Sri Lanka, India: Kerala, Periyar river.

Remarks: According to Menon (1964), *Garra ceylonensis* (Bleeker 1863) is closely related to *Garra mullya* in body stature and to some extent in its colour pattern, but strongly differs in interorbital width to head length ratio — 2 or less than 2 times in head length in *Garra mullya*, but greater than 2 times than *Garra ceylonensis*. Also, the width of suctorial disc to head width ratio is lesser in *Garra ceylonensis* as compared to *Garra mullya*.

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